

Application No. 09/973,639
Amendment Dated November 24, 2003
Reply to Office Action dated November 5, 2003

AMENDMENTS TO THE SPECIFICATION

Please replace the paragraph on page 2, beginning at line 5 , with the following rewritten paragraph:

--This application is a Continuation application of Co-Pending A.S.N. 09/573,267 (now U.S. Patent No. 6,402,703), filed on May 18, 2000 which in turn is a Continuation-in-Part of A.S.N. 09/439,795 (now U.S. Patent No. 6,322,524), filed on November 12, 1999, both of which are entitled DUAL RISER/SINGLE CAPILLARY VISCOMETER, which in turn is a Continuation-in-Part application of A.S.N. 08/919,906, now U.S. Patent No. 6,019,735, entitled VISCOSITY MEASURING APPARATUS AND METHOD OF USE, all of which are assigned to the same Assignee as the present invention, namely, Rheologics Visco Technologies, Inc., and all of whose entire disclosures are incorporated by reference herein --.

On page 14, line 16 to page 15, line 2, replace that paragraph with the following paragraph:

--As stated previously, the present application is a Continuation-in-Part of Co-Pending Application Serial No. 09/439,795 (now U.S. Patent No. 6,322,524), filed November 12, 1999, entitled DUAL RISER/SINGLE CAPILLARY VISCOMETER, which in turn is a Continuation-in-Part of A.S.N. 08/919,906 filed August 28, 1997 (now U.S. Patent No. 6,019,735), entitled VISCOSITY MEASURING APPARATUS AND METHOD OF USE, assigned to the same Assignee as the present invention and all of whose entire disclosures are incorporated by reference herein. For measuring the viscosity of circulating blood, including whole blood, of a living being, the apparatus and method as disclosed in U.S. Patent No. 6,019,735 are generally preferable. To

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negate venous pressure effects at low shear rates, cuffing the living being, or other suitable means, may be used with that apparatus and method.- -.

On page 15, replace the paragraph at lines 3-12 with the following rewritten paragraph:

- -An alternative apparatus and method of the present invention to negate pressure at low shear rates for measuring the viscosity of circulating blood, including whole blood, of a living being is shown generally at 920 in Fig. 1. The dual riser/single capillary (DRSC) viscometer 920 basically comprises a blood receiving means 22 and an analyzer/output portion 924. The analyzer/output portion 924 is similar to the analyzer output portion 24 of A.S.N. 09/439,795 (now U.S. Patent No. 6,322,524), except that one of the column level detectors, e.g., column level detector 54 for riser tube R1, is replaced with a single point detector 954, as will be discussed in detail later. Suffice it to say for now, that the apparatus 920 is similar in structure and operation to the apparatus 20 except for the substitution of one of the column level detectors with a single point detector 954.- -.

On page 16, line 19 to page 17, line 11, replace that paragraph with the following rewritten paragraph:

- -As mentioned earlier, the analyzer/output portion 924 differs from the analyzer/output portion 24 of A.S.N. 09/439,795 (now U.S. Patent No. 6,322,524) in that the analyzer/output portion 924 comprises only a single column level detector 56 and a single point detector 954. This modification to the analyzer/output portion 24 of A.S.N. 09/439,795 (now U.S. Patent No. 6,322,524) is based on the symmetry of the column of blood height (i.e., $h_1(t)$ and $h_2(t)$) vs. time data (see Fig. 6). As long as one of the two columns of blood 82/84 is monitored, the height vs. time data

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for the other column of blood can be generated by using a single height point from that column. In the invention of the present application, it is only necessary to monitor the change in position of one of the columns of blood in either riser tube R1 or riser tube R2 and to detect only one point from the other column of blood. The preferred method/means is to monitor the rising column of blood 84 which occurs in riser tube R2 and to detect the initial viscosity test run level (i.e., h_{1i} , as will be discussed in detail later) of the column of blood 82 in riser tube R1. Thus, it is within the broadest scope of this invention to cover a monitor that monitors either one of the moving columns of blood but not both (as is disclosed in A.S.N. 09/439,795, now U.S. Patent No. 6,322,524) and a single point detector for detecting one point from the other moving column of blood.- -.

On page 26, replace the paragraph at lines 3-10 with the following rewritten paragraph:

- -As stated in A.S.N. 09/439,795 (now U.S. Patent No. 6,322,524), there are a plurality of mathematical models that can be used as curve fitting models for the data obtained from the viscometers 920 and 1020, such as a power law model, a Casson model, a Carreau model, a Herschel-Bulkley model, a Powell-Eyring model, a Cross model, Carreau-Yasuda model. It is within the broadest scope of this invention to include all of these models. The following discussion utilizes a power law model and is used by way of example only and not by way of limitation. Thus, one skilled in the art could substitute any of the above curve fitting models for the exemplary power law model discussed below.- -.